

# GIS Projects

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# Presentation Outline

- Best Practices Study
- Collaborative Website
- GIS Environmental Applicability Project (GEA)
- Planning Triad Project for NAVAIR Weapons Division
  - Data Conversion and Range Integration (DCRI)
  - Operational Environmental Planning Tool (OEPT)

In FY00 CNO Environmental Readiness Division, OPNAV N45 developed a GIS of the Black Sea for use by the 6<sup>th</sup> Fleet

N45's interest in EIMS had begun

N45 asked me to find out about the environmental uses of GIS at shore activities

My interest in GIS had begun

# **The Best Practices Study Identified 4 Components of Successful Naval GIS Programs**

## **Technical Leadership and Advocacy**

- A Passionate Cheerleader that developed pilot projects that established the utility of GIS to others

## **Upper Management Buy-in and Support**

- Management that became convinced of the utility, saw the return on investment, and supported the program

## **Communication and Information Sharing**

- Collaboration and communication to share knowledge, plans, experiences and data

## **Multi-Program Integration**

- Centralized support to Environmental, Facilities, Real Estate, Training, etc. with shared responsibility for funding

# From the Best Practices Study:

## Communication and Information Sharing

- Collaboration and communication to share knowledge, plans, experiences and data

## This Finding Lead to:



**Navy/Marine Corps  
GIS Community of Practice**



## **A resource to encourage collaboration within the Navy/MC GIS community of practice with the following tools:**

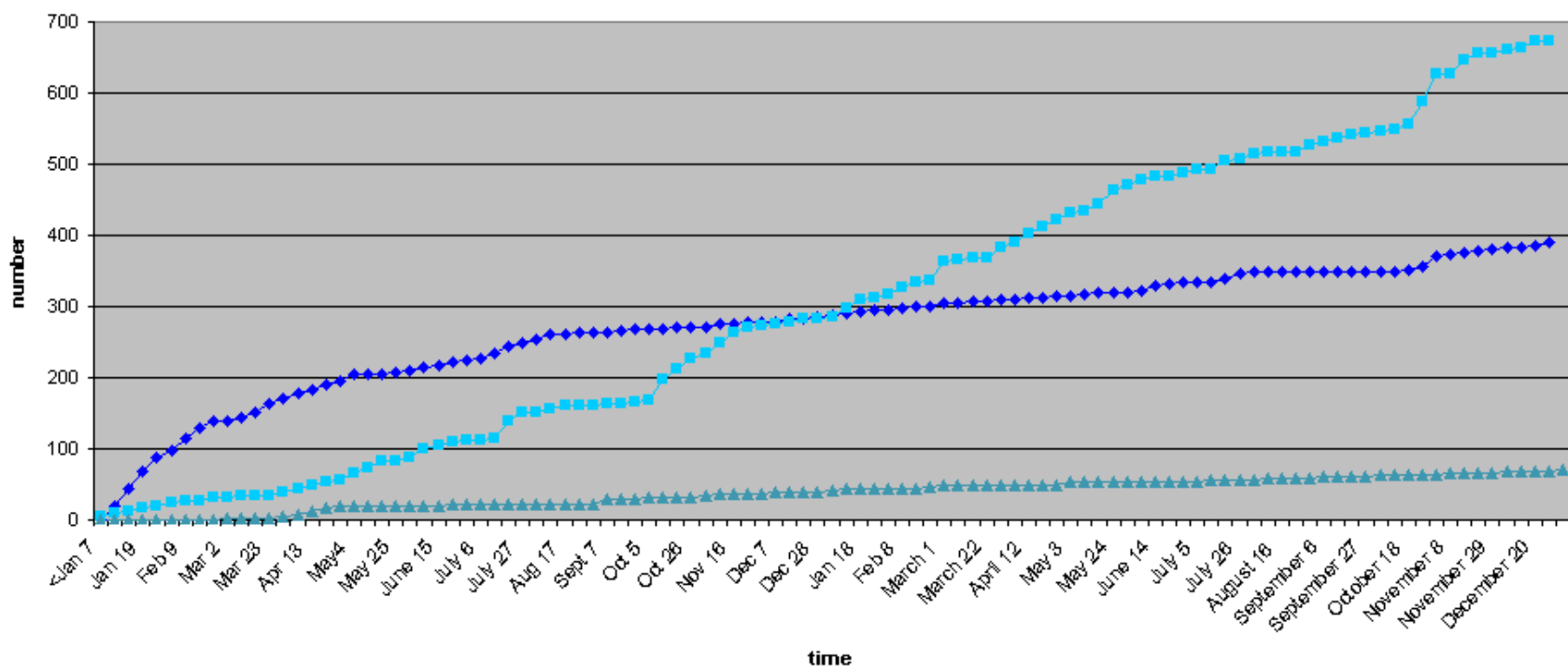
<b>DIRECTORY</b>	<b>Contact and other information for each user</b>
<b>GROUPS specific topic</b>	<b>Establish a group of users to coordinate a</b>
<b>NEWS</b>	<b>Make/read announcements to the community</b>
<b>LIBRARY folders</b>	<b>Post/edit/download files and organize into</b>
<b>FORUMS</b>	<b>Discuss an issue using threaded e-mail forums</b>
<b>CALENDAR</b>	<b>Post/read events on a central calendar</b>
<b>PROJECT REGISTRY project concepts</b>	<b>Enter and search existing projects and</b>
<b>USER SEARCH</b>	<b>Use search criteria to find specific users</b>

# Site Statistics

Number

Number of Posted Documents, Number of Registered Users, and Number of Forums

Navy/Marine Corps GIS Community of Practice  
Registered Users/Number of Postings

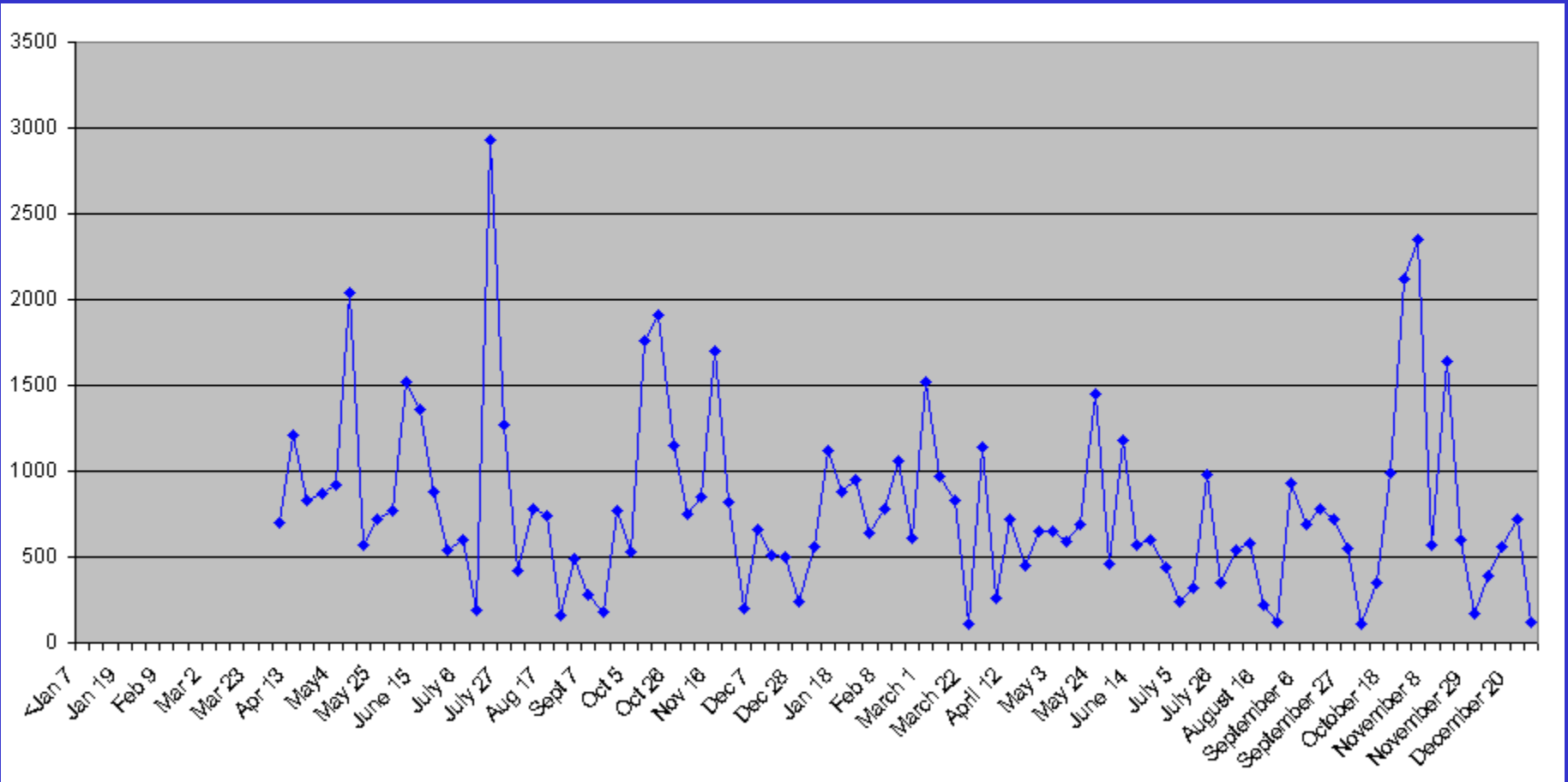


Week

# Site Statistics

Number of User Hits

Number



Week



# Current Site Statistics

<b>Users</b>	<b>392</b>
<b>Forums</b>	<b>71</b>
<b>Documents</b>	<b>669</b>
<b>User Hits per Week</b>	<b>1,100</b>
<b>New Documents Posted per Week</b>	<b>6</b>

In FY01 the “China Lake Depleted Uranium” Congressional Add provided an opportunity to:

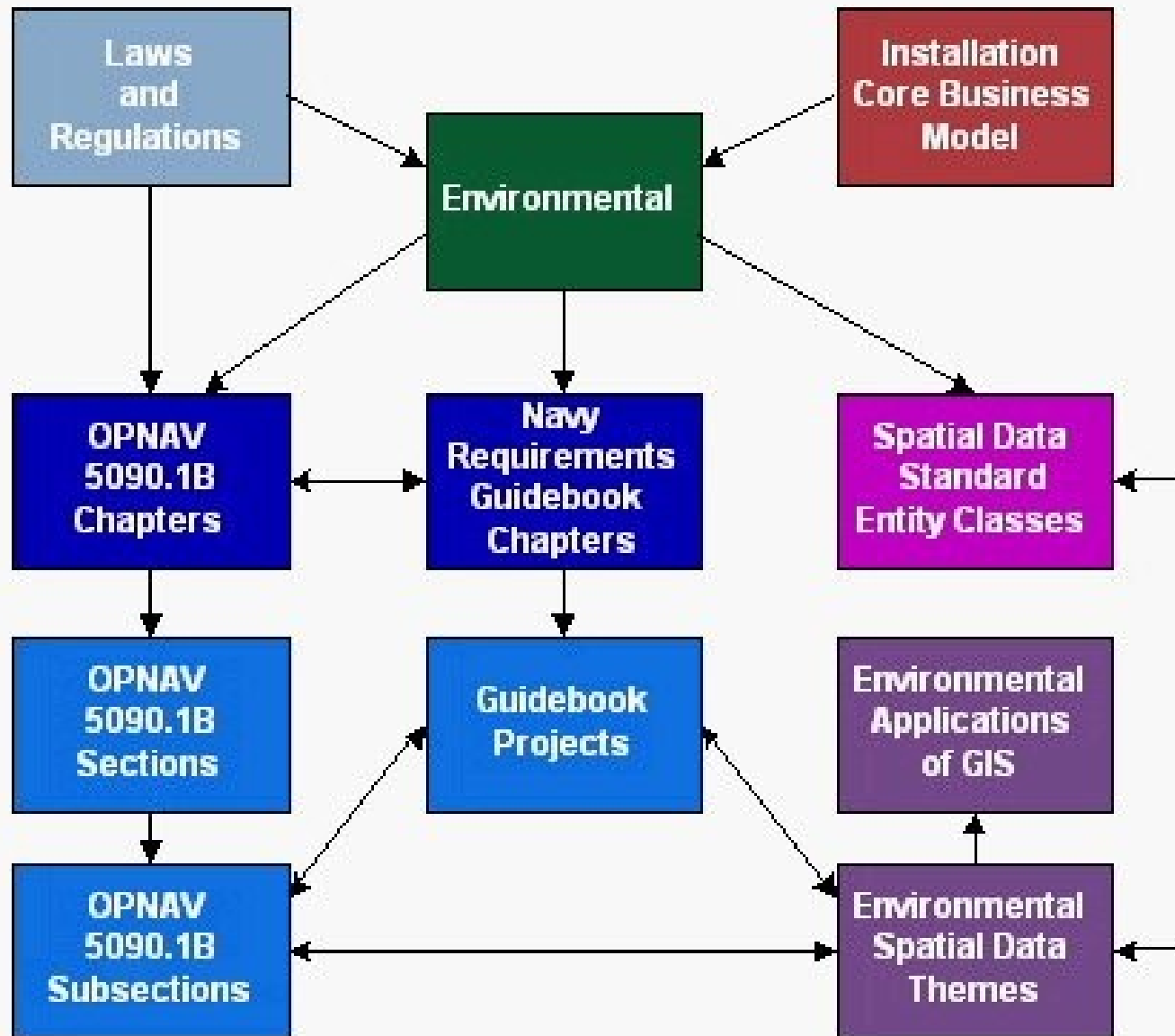
- 1) Show the relevance of GIS to Shore Environmental Compliance to N45

The GIS Environmental Applicability Project

- 2) Show integration of GIS support across organizational boundaries to N4 & NAVFAC

The NAVAIR WD Planning Triad

# The GIS Environmental Applicability “Menu”



# Results From Entering a 5090.1B

## Subsection

### 22-7c “Wetlands Protection”

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#### Traceability Matrix for 22-7c

[?](#) Help

 To comment about this page click [here](#).

Law Number	Law Title	Full Text	Traceability Matrix
United States Code			
<a href="#">33 USC 1251</a>	Clean Water Act	<a href="#">Full Text</a>	<a href="#">Related Information</a>
Executive Order			
<a href="#">EO 11990</a>	Protection of Wetlands	<a href="#">Full Text</a>	<a href="#">Related Information</a>

Code of Federal Regulations			
CFR Group Number	CFR Group Title	Full Text	Traceability Matrix
32 CFR 190	DOD Natural Resources Management Program	<a href="#">Full Text</a>	<a href="#">Related Information</a>
33 CFR 320-330	Clean Water Act Section 404 and Rivers and Harbors Act Section 10 Regulatory Programs	<a href="#">Full Text</a>	<a href="#">Related Information</a>

Geospatial Themes		
Theme Name	Theme Description	Traceability Matrix
Natural Resource Management Plan Project Areas	Areas where NR projects are planned or are being conducted	<a href="#">Related Information</a>
Wetlands	marshes, lakes, ponds, rivers, streams	<a href="#">Related Information</a>

Guidebook			
Number	Title	Full Text	Traceability Matrix
12002	Species or Habitat Management/Protection	<a href="#">Full Text</a>	<a href="#">Related Information</a>
12004	New Wetlands Protection Plans	<a href="#">Full Text</a>	<a href="#">Related Information</a>
12005	Conservation Mapping	<a href="#">Full Text</a>	<a href="#">Related Information</a>
12006	Wetlands Delineations	<a href="#">Full Text</a>	<a href="#">Related Information</a>
12027	Wetlands Protection Plans - Updates	<a href="#">Full Text</a>	<a href="#">Related Information</a>
12028	Conservation Mapping - Maintenance and Updates	<a href="#">Full Text</a>	<a href="#">Related Information</a>
12029	Wetlands Delineation - Updates	<a href="#">Full Text</a>	<a href="#">Related Information</a>

# Results From Entering a Geospatial Theme



Back

Traceability Matrix for Geospatial Themes - Wetlands



Help

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## OPNAV 5090.1B Subsections

Reference Number	Title	Traceability Matrix
7-4.2a	Discharge Permits	<a href="#">Related Information</a>
7-4.2d	Storm Water Discharges	<a href="#">Related Information</a>
7-4.4a	Dredge and Fill Operations: Permits	<a href="#">Related Information</a>
7-4.4b	Dredge and Fill Operations: Permit Exemptions	<a href="#">Related Information</a>
7-4.5	In-water Construction	<a href="#">Related Information</a>
7-5.1a	Point Sources	<a href="#">Related Information</a>
7-5.3	In-water Construction	<a href="#">Related Information</a>
22-7c	Wetlands Protection	<a href="#">Related Information</a>
9-4.2	Spill Prevention Control and Countermeasure (SPCC) Plans	<a href="#">Related Information</a>
9-5.4	SPCC Plans	<a href="#">Related Information</a>
9-5.5.1	Oily Waste/Waste Oil (OW/WO) Management Plan General Requirements	<a href="#">Related Information</a>

## Navy Guidebook Projects

Reference Number	Title	Traceability Matrix
08005	Design/Construct BMP and Stormwater Management Structures	<a href="#">Related Information</a>
12005	Conservation Mapping	<a href="#">Related Information</a>
12006	Wetlands Delineations	<a href="#">Related Information</a>
12028	Conservation Mapping - Maintenance and Updates	<a href="#">Related Information</a>
12029	Wetlands Delineation - Updates	<a href="#">Related Information</a>
12004	New Wetlands Protection Plans	<a href="#">Related Information</a>
09001	OPA 90 Facility Response Plans	<a href="#">Related Information</a>
09003	Natural Resources Damage Pre-Incident Planning	<a href="#">Related Information</a>
09007	Update SPCC Plans	<a href="#">Related Information</a>

# The NAVAIR WD Planning Triad Project



**A Single Source of Geospatial Data  
serving Range, Environmental,  
and Facility planners**

# Key Steps of the Planning Triad Project

## ◆ The “Foundation”

- Regional Shore Infrastructure Planning (RSIP)

## ◆ The “Core”

- ✓ Data Conversion & Range Integration (DCRI)

## ◆ The “Icing”

- ✓ Operational Environmental Planning Tool (OEPT)





# Data Conversion and Range Integration (DCRI)

## 1. Analyze planning data requirements

- Geospatial data
- Tabular data relevant to geospatial data
- Standards applicable to data

## 2. Identify existing planning data

- ✓ Proposals for gaps in the standards

## 3. Convert existing data

- ✓ Clean, complaint data

## 4. Migrate converter data

## 5. Link Geospatial and Tabular databases

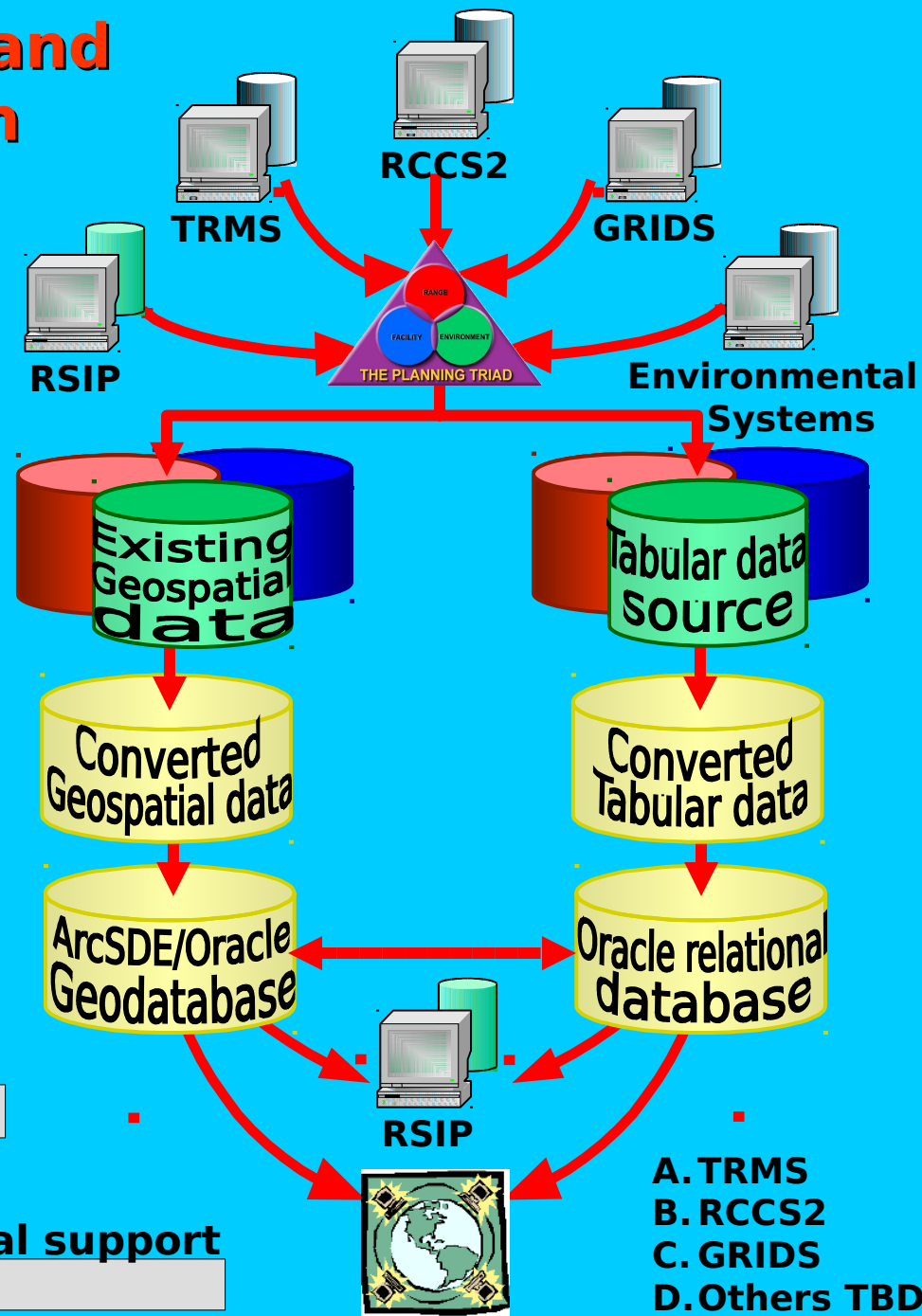
- ✓ Single source for planning data

## 6. Deliver data via RSIP

- ✓ User-friendly and secure access method

## 7. Evaluate integration with functional support tools

- ✓ Plan for elimination of manual data





# Operational Environmental Planning Tool (OEPT)



## 4 Data Categories

- Environmental
- Weapon & Platform
- Regulations & Policies
- Specific Test

The OEPT will integrate the Environmental Impact Statements (EIS) for the 2 ranges into their Operational Planning Processes

# OEPT Workflow

- ▲ Define Test
- ▲ Get Spatial Factors
- ▲ Get Other Factors
- ▲ Determine Impacts
- ▲ Evaluate Impacts
- ▲ Categorize Impacts

